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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/823,701      | 03/30/2001  | Kenneth W. Aull      | 15-0225             | 7427             |

7590 10/21/2004

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EXAMINER

SCHUBERT, KEVIN R

ART UNIT PAPER NUMBER

2137

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/823,701

Applicant(s)

AULL, KENNETH W.

Examiner

Kevin Schubert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/24/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 1-16 have been considered.

#### *Specification*

- 5 A grammatical error exists in the second sentence of the ninth paragraph. The word "identifying" should be "identify". Appropriate correction is required.

A grammatical error exists in the second sentence of the tenth paragraph. The word "of" should be inserted after the word "indicating". Appropriate correction is required.

10

An identification error exists in the twenty-fifth sentence of the twenty-first paragraph. USB stands for "Universal Serial Bus". Appropriate correction is required.

#### *Claim Objections*

- 15 Claims 14-16 are objected to because of the following informalities: the claims depend on claim 12, while the preamble suggests they should depend on claim 13. The examiner will assume the claims depend on claim 13. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

- 20 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- 25 (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

- 5 Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 5,6,8,13,14, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Vaeth, U.S. Patent No. 6,308,277.

- 10 As per claim 5, Vaeth discloses a method of preventing ID spoofing comprising:

a) allowing a user to access a registration server (column 7, lines 55-60);

b) upon the registration server receiving identification information from the user and also receiving a request by the user for a new signature certificate, the registration server querying a directory to obtain information regarding the identified user (column 8,  
15 lines 6-10, 21-23);

c) upon the registration server receiving information from the directory indicating that the identified user is not in the directory, the registration server informing the user that a new signature certificate will not be issued, thereby preventing an unauthorized user from ID spoofing to obtain a valid signature certificate (column 8, lines 41-44).

20

As per claims 6 and 14, Vaeth limits the method/apparatus of independent claims 5 and 13, further comprising providing user identifiers and their corresponding digital signature certificates in said directory (column 8, lines 7-10, 41-44).

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As per claims 8 and 16, Vaeth limits the method/apparatus of independent claims 5 and 13, further comprising providing a personal revocation authority to revoke a user's previous signature certificate, the personal authority being chosen so as to personally recognize a user (column 8, 41-45). The applicant should note that Vaeth refers to the  
5 revocation authority as "RA".

As per claim 13, the applicant discloses all the claim limitations of claim 5, which are met by Vaeth as described above, with the following additional limitation which is also met by Vaeth:

10 a directory accessible by the registration server, the directory storing information regarding all users (column 8, lines 7-10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
15 obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made  
20 to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,7,9-12, and 15 are rejected under 35 U.S.C. 103(a). Claims  
25 1,2,4,9,10, and 12 are unpatentable over Vaeth and further in view of Asay, U.S. Patent Application Publication No. 2002/0062438.

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As per claim 1, the applicant discloses the claim limitations of claim 5, which are met by Vaeth as described above, with the following additional limitation which is met by Asay:

upon the registration server receiving information from the directory indicating  
5 that the identified user already possesses a signature certificate, the registration server informing the user that a new signature certificate will not be issued until the old signature certificate has been revoked, thereby preventing an unauthorized user from ID spoofing to obtain a valid signature certificate (paragraph [0065] and paragraph [0142]).

It should be noted that Asay refers to the user as a subscriber. It should also be  
10 noted that the automatic process by which the old certificate is revoked before the user gets the new certificate requires that the user's request to revoke the certificate is in the standby application as implied in the first sentence of paragraph [0142]. In a similar fashion, applicant's claim 1 discloses that the user is informed by the certificate authority that in order to get a new certificate he has to give up his old one. Asay has disclosed a  
15 security method whereby an automatic revocation of an old certificate takes place when a new certificate is issued in a user's standby certificate application.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the ideas of Asay with the ideas of Vaeth. As Asay further elaborates in paragraph [0015], "Suspending and/or revoking certificates are an  
20 important means of minimizing the consequences of errors by the certification authority or subscriber. Depending on applicable legal rules, a certification authority may avert further loss due to inaccuracy in the certificate by revoking it. A subscriber can revoke a certificate to prevent reliance on digital signatures created using a compromised, e.g., lost or stolen, private key". Thus, one of ordinary skill in the art at the time of the

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invention would have been motivated to combine the ideas of Vaeth with the ideas of Asay to create a secure certificate environment.

As per claims 2 and 10, the applicant limits independent claims 1 and 9, which are met by Vaeth in further view of Asay, with the following limitation which is also met by Vaeth:

further comprising providing user identifiers and their corresponding digital signature certificates in said directory (column 8, lines 7-10, 41-44).

As per claims 4 and 12, the applicant limits independent claims 1 and 9, which are met by Vaeth in further view of Asay, with the following limitation which is also met by Vaeth:

further comprising providing a personal revocation authority to revoke a user's previous signature certificate, the personal revocation authority being chosen so as to personally recognize a user (column 8, lines 41-45).

As per claim 9, the applicant limits independent claim 5, which is met by Vaeth in further view of Asay, with the following additional limitation which is also met by Vaeth:

a directory accessible by the registration server, the directory storing information regarding all users (column 8, lines 7-10).

Claims 3,7,11, and 15 are unpatentable over Vaeth and Asay and further in view of Zhou.

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As per claims 3,7,11, and 15, the applicant limits independent claims 1,5,9, and 13 which are met by Vaeth in further view of Asay in the case of 1 and 9 and Asay in the case of 5 and 13, with the following limitation which is met by Zhou:

further comprising providing an authoritative database including user identifiers,  
5 wherein the directory is updated from the authoritative database.

Zhou discloses the benefit of using directory integration with an authoritative database of user identifiers which he calls a metadirectory. In the second paragraph Zhou writes, "Directory integration lets network administrators manage directory information from one directory and automate the process of changing information in  
10 multiple directories. In the short run, directory integration lowers the cost of directory management because it reduces human involvement in directory management. A comprehensive directory-integration system often requires an enterprise directory to store and unify directory information in a central repository, or metadirectory. In the long run, you can incorporate into a metadirectory new network services—for example, ...  
15 public key infrastructure (PKI), to manage digital certificates for e-commerce". It would have been obvious to one of ordinary skill in the art at the time the invention was filed to have combined the ideas of Zhou with the ideas of Asay and Vaeth because one would have motivation to use an authoritative database to better manage digital certificates as Zhou discloses.

20

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-  
25 4239. The examiner can normally be reached on M-F 8:00-5:00.



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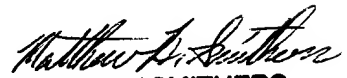
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

- 5 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business
- 10 Center (EBC) at 866-217-9197 (toll-free).

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MATTHEW SMITHERS  
PRIMARY EXAMINER  
*Art Unit 2137*